Ionization as a mechanism.

By Eugene A. Ellis (Dec. 2015)

The defined ionization potential of an element is a measure of its ability to enter chemical reactions requiring ion formation or donation of electrons and related to the nature of the chemical bonding in compounds formed by elements. Ionization, however, encompasses more than this chemistry definition. The Ionic Growing Earth (IGE) posits an element can grow and heat after the first time it ionizes. Table 1r is from NBS-34 and shows the (potential) ionization energy levels and limits of the first 30 elements. The shaded areas are an anomaly designating the levels when the element is heating. Reading the chart from right to left (past to present) indicates decay in energy levels.

Decay rate. The IGE 8-element supplement establishes the present decay rate as one electron volt per 1.6147 MY by using two parameters (elemental atomic weight and elemental percentage of total Earth) and an exponential equation for doubling, $y^x = 2$.

The first element to ionize was calcium with its limit of 5469.74 eV (Table 1r, column XX). The time of that ionization was 8,832 MYA (5469.74 x 1.6147). Before ~8,800 MYA, all celestial bodies consisted of elemental atoms...no ions...no plasma...no free electrons...no rock planets...no asteroids...no meteorites.

The timing of water's arrival. When oxygen was at its limit of 871.387 eV (Table 1r, column VIII), it ionized for the first time. The time of that ionization was 1,407 MYA (871.387 x 1.6147). There was no water on Earth (or elsewhere) prior to ~1,400 MYA.

The geo-orbital time scale of 8 elements. The red lines in Figures 1r and 2r denote the heating phase and the black lines denote the growing phase. The numbers in Figure 2r are in electron volts and encompass the heating phases. Notice in Figure 1r the Earth was predominately heating until ~850 MYA; however, the crust began to cool ~1,400 MYA when water arrived. Rocks (the crust) formed from cooling after exposure to extreme heat. Some joining (ionization) and melding of elements could occur but geological sequencing involving rocks was not possible before 1,400 MYA.

A bit about time and universal time, differentiate atomic clocks from geo-orbital clocks.

CONCLUSIONS:

The elements that comprise the planets are increasing in mass. As Earth steadily gains mass, it moves away from the sun in larger and larger spiral orbits, notably when the increases in mass are exponential.

The mass doubling rate changes each time an element changes phase from growing to heating or from heating to growing. The '*x*' column (9th) of Table 4r demonstrates the changing rates. The last two columns of Table 4r indicate the total percentage of elements growing and heating at specified times. The faster mass doubling rates, 'x', are due to the higher percentages of the growing elements.

There is no uniformity of growth/expansion in the universe. Matter that comprises the various planets differs in elements and in amounts. Each planetary clock is dependent upon the total percentage of its growing elements. Consequently, every planetary clock is different from all other planetary clocks in the universe.

Ionization is the reason or mechanism permitting oxygen to become water. Ionization is the mechanism allowing each element to grow and heat. Comprehensibly, ionization becomes the mechanism growing the other planets in the universe and as a result, the universe expands. Everything in the universe is observed to be moving away from each other.